In the Specification:

Please amend the specification as shown:

Please delete the paragraph on page 13, lines 16-24, and replace it with the following paragraph:

After DNA was extracted from whole blood buffy coat preparations or Guthrie cards according to standard protocols, sample DNA was amplified using PCR (sense primer, 5'-AGGCTCATGCCAAAGTCTGG **(SEQ ID NO: 5)**; anti-sense primer, 5'-GTTTCCATGATGAACTTTTTGAGG **(SEQ ID NO: 6)**) with AmpliTaq Gold (Perkin Elmer) with supplied buffer under the following conditions: 95°C 10 min, followed by 35 cycles of 94°C 30s, 60°C 30s, 72°C 30s, followed by a 10 min 72°C final extension. PCR products were then digested with Mae III (Roche) at 55°C for 16 hrs, and electrophoretically separated on a 1.6% agarose gel. The KL-VS allele is characterized by diagnostic Mae III restriction fragments of 265 and 185 basepairs.

In the Claims:

Please amend the Claims as shown:

We claim:

1. (Original) A method for determining a patient's predisposition to develop coronary artery disease, comprising:

a. isolating DNA from a patient; and

b. analyzing the DNA to detect the presence of the KL-VS allele.

2. (Original) The method of claim 1 wherein detection of the KL-VS allele indicates the patient is predisposed to develop coronary artery disease.

3. (Original) A method of claim 1, wherein the detection of the KL-VS allele is characterized by diagnostic Mae III restriction fragments of 265 and 185 basepairs.

4. (Original) The method of claim 1, wherein detecting the KL-VS allele comprises RFLP analysis of a nucleic acid.

5. (Original) The method of claim 1, wherein detecting the KL-VS allele comprises amplification of a nucleic acid.

6. (Original) The method of claim 1, wherein the DNA is analyzed by:

a. amplifying the DNA in a polymerase chain reaction to produce an amplification product;

b. treating the amplified DNA with one or more restriction fragment enzymes; and

c. size fractionation of the amplification products.

7. (Currently Amended) The method of claim 6, wherein the polymerase chain reaction is performed with one or more oligonucleotides selected from the group consisting of:

sense primer 5' AGGCTCATGCCAAAGTCTGG 3' (SEQ ID No: ~~7~~**5**); and

antisense primer 5' GTTTCCATGATGAACTTTTTGAGG 3' (SEQ ID No: ~~8~~**6**).

8. (Original) The method of claim 7, wherein said one or more oligonucleotides are detectably labeled.

9. (Original) A method of predicting increased propensity for coronary artery disease in a patient, comprising:

detecting in a patient the presence of at least one copy of the KL-VS allele;

wherein detecting said allele indicates that said patient has an increased propensity for coronary artery disease.

10. (Original) A method for treating a patient suffering or susceptible to coronary artery disease, comprising:

selecting a patient that has a the KL-VS allele; and

treating the selected patient for coronary artery disease.

11. (Original) The method of claim 10 wherein the selected patient is treated by administering a therapeutic agent for coronary artery disease.